This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1-31. (Canceled).

32. (Currently Amended) A substantially pure cytotoxic population of educated, antigen-specific ~~cytotoxic~~ immune effector cells expanded in culture by contacting ~~said~~ immune effector cells with hybrid cells wherein the immune effector cells are T lymphocytes, wherein said population comprises $CD4^+$ immune effector cells and $CD8^+$ immune effector cells, wherein said hybrid cells are generated by fusion between at least one mammalian dendritic cell and at least one mammalian tumor or cancer cell that expresses a cell-surface antigen, wherein the dendritic cell and the cancer or tumor cell are from the same mammalian species, wherein the dendritic cell can process and present antigens, and wherein at least half of the hybrid cells express, in an amount effective to stimulate an immune system, (a) a MHC class II molecule, (b) B7, and (c) the cell-surface antigen.

35. (Cancelled).

36. (Currently Amended) The population according to claim 32, wherein the antigen-specific ~~cytotoxic~~ immune effector cells are genetically modified cells.

37. (Original) The population according to claim 32, wherein the hybrid cells are genetically modified cells.

38. (Original) The population according to claim 36, wherein the genetic modification comprises introduction of a polynucleotide.

39. (Original) The population according to claim 38, wherein the polynucleotide encodes a peptide, a ribozyme or an antisense sequence.

42. (Currently Amended) A substantially pure cytotoxic population of educated, antigen-specific ~~cytotoxic~~ immune effector cells produced by culturing immune effector cells with hybrid cells wherein the immune effector cells are T lymphocytes, wherein said population comprises $CD4^+$ immune effector cells and $CD8^+$ immune effector cells, wherein said hybrid cells are generated by fusion between at least one mammalian dendritic cell and at least one mammalian tumor or cancer cell that expresses a cell-surface antigen, wherein the dendritic cell and the cancer or tumor cell are from the same mammalian species, wherein the dendritic cell can process and present antigens, and wherein at least half of the hybrid cells express, in an amount effective to stimulate an immune system, (a) a MHC class II molecule, (b) B7, and (c) the cell-surface antigen.

45. (Cancelled).

46. (Currently Amended) The population according to claim 42, wherein the antigen-specific ~~cytotoxic~~ immune effector cells are genetically modified cells.

47. (Original) The population according to claim 42, wherein the hybrid cells are genetically modified cells.

48. (Original) The population according to claim 46, wherein the genetic modification comprises introduction of a polynucleotide.

49. (Original) The population according to claim 48, wherein the polynucleotide encodes a peptide, a ribozyme or an antisense sequence.

52. (Currently Amended) The population according to claim 42, wherein the ~~cytotoxic~~ immune effector cells are naïve prior to culturing said immune effector cells with hybrid cells.

53. (Currently Amended) The population according to claim 42, wherein the ~~cytotoxic~~ immune effector cells are educated prior to culturing said cytotoxic immune effector cells with hybrid cells.

54. (Currently Amended) The population according to claim 42, wherein the ~~cytotoxic~~ immune effector cells are produced by culturing immune effector cells with hybrid cells in the presence of a cytokine.

55. (Original) The population of claim 54, wherein the cytokine is IL-2.

84. (Currently Amended) A composition comprising the population of antigen-specific ~~cytotoxic~~ immune effector cells of claim 32 or 42 and a pharmaceutically acceptable carrier.

89. (Currently Amended) The population according to claim 32, wherein the ~~cytotoxic~~ immune effector cells are produced by contacting immune effector cells with hybrid cells in the presence of a cytokine.

90. (Previously presented) The population of claim 89, wherein the cytokine is IL-2.